

# **SYSTEM AND METHOD FOR MANAGING MULTICAST GROUP MEMBERSHIP**

## **ABSTRACT**

- 5 A system and method for efficiently managing membership in a multicast communication group. The system may comprise any number of end nodes (e.g., channel adapters, network interface adapters) and routing nodes (e.g., switches), and the method may be implemented by a processor coupled to any node. Each node in a network may be a member of the multicast group and/or the multicast
- 10 tree (MCT) that routes the group's multicast communications. A node need not be a member of the group to be a member of the tree. Network links included in the MCT are a subset of a network minimum spanning tree (MST). When a node is added to the group, the MST is searched from that node until a node within the MCT is found. Each time a member is removed from the group, the MCT is
- 15 pruned to reduce unneeded communications.